



Federal Aviation Administration
Air Traffic Airspace Branch, ASW-520
2601 Meacham Blvd.
Fort Worth, TX 76137-0520

Aeronautical Study No.
2006-AAL-81-OE
Prior Study No.
2003-AAL-658-OE

Issued Date: 03/24/2006

Unicom
David Heimke
5450 A Street
Anchorage, AK 99518

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has completed an aeronautical study under the provisions of 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Antenna Tower
Location:	St. Mary's, AK
Latitude:	62-3-9.9 NAD 83
Longitude:	163-15-50.3
Heights:	139 feet above ground level (AGL) 638 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure should be marked and/or lighted in accordance with FAA Advisory Circular 70/7460-1 K, Obstruction Marking and Lighting, red lights - Chapters 4,5(Red),&12.

It is required that the enclosed FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

☐ At least 10 days prior to start of construction
(7460-2, Part I)

☒ Within 5 days after the construction reaches its greatest height
(7460-2, Part II)

As a result of this structure being critical to flight safety, it is required that the FAA be kept apprised as to the status of the project. Failure to respond to periodic FAA inquiries could invalidate this determination.

See attachment for additional condition(s) or information.

This determination expires on 09/24/2007 unless:

- (a) extended, revised or terminated by the issuing office.
- (b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on

the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE POSTMARKED OR DELIVERED TO THIS OFFICE AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before April 23, 2006. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted in triplicate to the Manager, Airspace and Rules Division - Room 423, Federal Aviation Administration, 800 Independence Ave, Washington, D.C. 20591.

This determination becomes final on May 3, 2006 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Office of Airspace and Rules via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

A copy of this determination will be forwarded to the Federal Communications Commission if the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (202)267-9219.
On any future correspondence concerning this matter, please refer to
Aeronautical Study Number 2006-AAL-81-OE.

Signature Control No: 456590-448564

(DNH)

Kevin P. Haggerty
Manager, Obstruction Evaluation Service

Attachment(s)
Additional Information
Frequency Data

7460-2 Attached

NARRATIVE AERONAUTICAL STUDY NO. 2006-AAL-81-OE

1. LOCATION OF PROPOSED CONSTRUCTION

The proposal originally called for a 175 AGL antenna which this aeronautical study found to adversely effect the St. Mary's (KSM) instrument approach procedures. The no-effect height, which was accepted by the proponent, is at 139 AGL (638 MSL). This antenna, at the revised 139 AGL, is to replace an existing 34 AGL tower at the same location. It would be located approximately 6,400 feet east of the KSM RWY 24 threshold on a 499 MSL summit (Andreafsky Mountain) just south of the airport road from St. Mary's, Alaska. KSM RWY 24 threshold elevation is 301.

2. OBSTRUCTION STANDARDS EXCEEDED

The proposed structure is identified as an obstruction under the standards of Federal Aviation Regulations, Part 77, as follows, Section 77.25(a): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.25, 77.28, or 77.29. Exceeds runway 24 horizontal surface areas by 177 feet.

3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules (VFR) follows: It would be the tallest manmade structure in the St. Mary's area.

b. The impact on arrival, departure, and en route procedures for aircraft operating under instrument flight rules (IFR) follows: Any height about 638 MSL will adversely effect the RNAV (GPS) RWY 24 instrument approach.

c. The impact on all-existing public-use airports and aeronautical facilities follows: None.

d. The impact on all planned public-use airports and aeronautical facilities follow: None.

e. The cumulative impact resulting from the proposed construction or alteration of a structure when combined with the impact of other existing or proposed structures follows: None.

4. CIRCULATION AND COMMENTS RECEIVED

The proposal was not circulated for public comment based upon the results of an internal aeronautical study.

5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient use of navigable airspace by aircraft.

6. BASIS FOR DECISION

The proposed antenna height would exceed the Federal Aviation Regulation Part 77 horizontal surface area for St. Mary's RWY 24 by 177 feet, which may be mitigated by marking and lighting.

7. CONDITIONS

The maximum height for no interference with the KSM RWY 24 instrument approach is 638 MSL. In order to maintain current IFR minimums, within five days after the structure reaches its greatest height, provide a completed FAA form 7460-2,

Actual Construction notification, along with an engineering/survey certification from a professional engineer, architect or surveyor on the certifiers letterhead regarding the proposed site location height in the following exact format:

For Aeronautical Study No. 2006-AAL-81-OE, I certify that the latitude _____ and longitude _____ are accurate within +/- 50 feet horizontally; and the site elevation of _____ feet AMSL is accurate within +/- 3 feet vertically. With a structure height of _____ feet AGL, the overall height is _____ feet AMSL. The horizontal datum (coordinates) are in terms of the North American Datum of 1983 (NAD83) and expressed as degrees, minutes and seconds. The vertical datum heights are in terms of the National Geodetic Vertical Datum of 1988, and are determined to the nearest foot.

SIGNED: _____
(Professional Engineering Title (REQUIRED))
(With seal imprint)

PRINTED: _____

The FAA form 7460-2, Actual Construction notification, will be used by the National Aeronautical Charting Office for charting and inclusion into the national digital obstacle file. Completion of the 7460-2 can be accomplished at <http://oeaaa.faa.gov>.

The required survey requirement is necessary to validate the actual site elevation and height of the tower without adding 'buffers' due to charting inaccuracies. It can be uploaded into the case file (in Adobe pdf format) at <http://oeaaa.faa.gov>. Additionally, send a hard copy of the completed certified survey to FAA/Anchorage Flight Procedures Office, Attn: Jim McFarlane, 222 West 7th Avenue Box 14, Anchorage, AK 99513-7587.

The structure shall be marked and lighted as outlined in chapters 4, 5, and 12, of Advisory Circular AC 70/7460-1K. The advisory circular is available online at http://www.faa.gov/ats/ata/ai/AC70_7460_1K.pdf. It is also free of charge, from the Department of Transportation, Subsequent Distribution Section, M-494.3, 400 7th Street, SW, Washington, DC 20590.

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Frequency Data for ASN 2006-AAL-81-OE

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
5900	12000	MHz	10	KW